

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

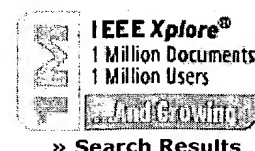
As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

L Number	Hits	Search Text	DB	Time stamp
1	34	confusable same class\$11	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 19:27
2	17	(sub-word same sequence) and query	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 19:40
3	41	(sub-word same sequence) and classif\$8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 19:58
4	9	((sub-word same sequence) and classif\$8) and confus\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 19:58
5	19	((confusable and (sub-word or token or phoneme)) and query) and class\$11	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:03
6	10	(confusable same class\$11) and index	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:03
7	28	(index with pointer with key) same query	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:06
8	5125	707/102	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:06
9	4663	707/104.1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:06
10	3525	707/101	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:06
11	5189	707/100	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:06
12	7000	707/1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:06
13	4231	707/2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07
14	7108	707/3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07

15	3961	707/4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07
16	3266	707/5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07
17	2762	707/6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07
18	1318	704/231	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07
19	1278	704/251	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/11 20:07



Welcome
United States Patent and Trademark Office


[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)
[» Search Results](#)

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced
- ☐ CrossRef

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

[Print Format](#)

Your search matched **3** of **1079782** documents.

A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

☐ Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

1 Constraint satisfaction model for enhancement of evidence in recognition of consonant-vowel utterances

Gangashetty, S.V.; Sekhar, C.C.; Yegnanarayana, B.;

Multimedia and Expo, 2003. ICME '03. Proceedings. 2003 International Conference on , Volume: 3 , 6-9 July 2003

Pages:III - 201-4 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(378 KB\)\]](#) IEEE CNF

2 Neural network models for spotting stop consonant-vowel (SCV) segments in continuous speech

Sekhar, C.C.; Yegnanarayana, B.;

Neural Networks, 1996., IEEE International Conference on , Volume: 4 , 3-6 June 1996

Pages:2003 - 2008 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(408 KB\)\]](#) IEEE CNF

3 Constraint satisfaction model for enhancement of evidence in recognition of consonant-vowel utterances

Gangashetty, S.V.; Sekhar, C.C.; Yegnanarayana, B.;

Acoustics, Speech, and Signal Processing, 2003. Proceedings. (ICASSP '03). 2003 IEEE International Conference on , Volume: 2 , 6-10 April 2003

Pages:II - 753-6 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(385 KB\)\]](#) IEEE CNF




US Patent & Trademark Office

Subscribe (Full Service) Register (Limited Service) Free! Sitemap

Search: ☒ The ACM Digital Library ☐ The Guide

THE ACM DIGITAL LIBRARY

 [Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used **classification confusable** Found 1 of 143,484

Sort results by

Display results

☒ [Save results to a Binder](#)

☒ [Search Tips](#)

☐ [Open results in a new window](#)

Try an [Advanced Search](#)
Try this search in [The ACM Guide](#)

Results 1 - 1 of 1


Relevance scale ☐ ☐ ☐ ☐ ☐

¹ [Classification characteristics of SOM and ART2](#)


J. J. Aleshunas, Daniel C. St. Clair, W. E. Bond

April 1994

Proceedings of the 1994 ACM symposium on Applied computing

Full text available:  pdf(548.68 KB)





Additional Information: [full citation](#), [references](#), [index terms](#)




Keywords: ART2, SOM, neural network, unsupervised learning

Results 1 - 1 of 1

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



US Patent & Trademark Office

Search: ☒ The ACM Digital Library ☐ The Guide

SEARCH

Sub-word + classification

THE ACM DIGITAL LIBRARY

Feedback Report a problem Satisfaction survey

Term used **classification**

Found 32 of 79 searched out of 79.

Sort results by ☒ Save results to a BinderTry an [Advanced Search](#)Display results ☐ Search TipsTry this search in [The ACM Guide](#)☐ Open results in a new window

Results 1 - 20 of 32

Result page: [1](#) [2](#) [next](#)Relevance scale ☐ ☐ ☐ ☐ ☐**1** [Input/output access pattern classification using hidden Markov models](#)

Tara M. Madhyastha, Daniel A. Reed

November 1997

Proceedings of the fifth workshop on I/O in parallel and distributed systemsFull text available:  pdf(1.46 MB)Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)**2** [Building a complete inverted file for a set of text files in linear time](#)

A. Blumer, J. Blumer, A. Ehrenfeucht, D. Haussler, R. McConnell

December 1984

Proceedings of the sixteenth annual ACM symposium on Theory of computingFull text available:  pdf(1.79 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Given a finite set of texts S and $\{s_1, \dots, s_k\}$ over some fixed finite alphabet Σ , a complete inverted file for S is an abstract data type that provides the functions $\text{find}(s_i)$, which returns the longest prefix of s_i which occurs in S ; $\text{freq}(s_i)$, which returns the number of times s_i occurs in S ; and $\text{locations}(s_i)$...

3 [How to show something is not: Proofs in formal language and computability theory](#)

Keith Harrow

August 1978

ACM SIGCSE Bulletin, Proceedings of the ninth SIGCSE technical symposium on Computer science education, Volume 10 Issue 3Full text available:  pdf(425.92 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Most introductory courses in theoretical computer science (formal language theory or computability theory) start with a seemingly endless series of definitions, including what it means for a grammar or language to be regular, context-free, etc., or what it means for a function to be recursive, primitive recursive, or partial recursive. Bright students immediately ask two questions. First, what are examples of languages or functions that belong to one class but not the other? Second, is some ...

4 [On \(un\)predictability of formal languages \(Extended Abstract\)](#)

A. Ehrenfeucht, G. Rozenberg

May 1975


Proceedings of seventh annual ACM symposium on Theory of computingFull text available:  pdf(190.92 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Formal language theory deals with a variety of classes of languages. Some of these are abstracting features of languages used for communication (as e.g., natural languages, programming languages or languages used in logic), some of them are abstracting features of languages used for description of processes (as e.g. basic classes of L languages) and still others are considered for mathematical reasons. Can we have a criterion for deciding whether a language can serve as a "communicati ...

5 [An expert system for the production of phoneme strings from unmarked English text using machine-induced rules](#)

Alberto Maria Segre, Bruce Arne Sherwood, Wayne B. Dickerson

September 1983

Proceedings of the first conference on European chapter of the Association for Computational LinguisticsFull text available:  pdf(608.08 KB) Publisher SiteAdditional Information: [full citation](#), [abstract](#), [references](#)

The speech synthesis group at the Computer-Based Education Research Laboratory (CERL) of the University of Illinois at Urbana-Champaign is developing a diphone speech synthesis system based on pitch-adaptive short-time Fourier transforms. This system accepts the phonemic specification of an utterance along with pitch, time, and amplitude warping functions in order to produce high quality speech output from stored diphone templates. This paper describes the operation of a program which operates as ...

6 [Universal Mechanisms for Data-Parallel Architectures](#)

Karthikeyan Sankaralingam, Stephen W. Keckler, William R. Mark, Doug Burger

December 2003

Proceedings of the 36th Annual IEEE/ACM International Symposium on Microarchitecture

Full text available:

Additional Information:


[full citation, abstract, citations, index terms](#)

Data-parallel programs are both growing in importance and increasing in diversity, resulting in specialized processors targeted at specific classes of these programs. This paper presents a classification scheme for data-parallel program attributes, and proposes micro-architectural mechanisms to support applications with diverse behavior using a single reconfigurable architecture. We focus on the following four broad kinds of data-parallel programs- DSP/multimedia, scientific, networking, and real-time g ...

7 Audio-visual speech recognition using red exclusion and neural networks

Trent W. Lewis, David M. W. Powers
January 2002

Australian Computer Science Communications , Proceedings of the twenty-fifth Australasian conference on Computer science - Volume 4, Volume 24 Issue 1

Full text available: pdf(984.28 KB)

Additional Information: [full citation, abstract, references, index terms](#)

Automatic speech recognition (ASR) performs well under restricted conditions, but performance degrades in noisy environments. Audio-Visual Speech Recognition (AVSR) combats this by incorporating a visual signal into the recognition. This paper briefly reviews the contribution of psycholinguistics to this endeavour and the recent advances in machine AVSR. An important first step in AVSR is that of feature extraction from the mouth region and a technique developed by the authors is briefly present ...

Keywords: audio-visual speech recognition, neural networks, sensor fusion

8 Quantitative approximations to the word

Edward Gammon
September 1969

Proceedings of the 1969 conference on Computational linguistics

Full text available: pdf(837.96 KB)

Additional Information: [full citation, references](#)

9 Query containment and rewriting using views for regular path queries under constraints

Gösta Grahne, Alex Thoma
June 2003

Proceedings of the twenty-second ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems

Full text available: pdf(270.29 KB)

Additional Information: [full citation, abstract, references, citations, index terms](#)

In this paper we consider general path constraints for semistructured databases. Our general constraints do not suffer from the limitations of the path constraints previously studied in the literature. We investigate the containment of regular path queries under general path constraints. We show that when the path constraints and queries are expressed by words, as opposed to languages, the containment problem becomes equivalent to the word rewrite problem for a corresponding semi-Thue system. Co ...

10 Session 5B: Visibly pushdown languages

Rajeev Alur, P. Madhusudan
June 2004

Proceedings of the thirty-sixth annual ACM symposium on Theory of computing

Full text available: pdf(247.03 KB)

Additional Information: [full citation, abstract, references, index terms](#)

We propose the class of *visibly pushdown languages* as embeddings of context-free languages that is rich enough to model program analysis questions and yet is tractable and robust like the class of regular languages. In our definition, the input symbol determines when the pushdown automaton can push or pop, and thus the stack depth at every position. We show that the resulting class Vpl of languages is closed under union, intersection, complementation, renaming, concatenation, and ...

Keywords: ω -languages, context-free languages, logic, pushdown automata, regular tree languages, verification

11 Optimal amnesic probabilistic automata or how to learn and classify proteins in linear time and space

Alberto Apostolico, Gill Bejerano
April 2000

Proceedings of the fourth annual international conference on Computational molecular biology

Full text available: pdf(675.67 KB)

Additional Information: [full citation, abstract, references, citations](#)

Statistical modeling of sequences is a central paradigm of machine learning that finds multiple uses in computational molecular biology and many other domains. The probabilistic automata typically built in these contexts are subtended by uniform, fixed-memory Markov models. In practice, such automata tend to be unnecessarily bulky and computationally imposing both during their synthesis and use. In [8], much more compact, tree-shaped variants of probabilistic automata are built which assume a ...

12 Automatic code generation for microprocessor based systems

Ronald Sobczak, Manton Matthews
May 1985

Proceedings of the 1985 ACM SIGSMALL symposium on Small systems

Full text available: pdf(589.10 KB)

Additional Information: [full citation, abstract, references](#)

In this paper we present a system for the automatic generation of code generators for small computer systems. This system runs under Unix (a trademark of AT&T Bell Laboratories) and along with Lex and YACC provides an automatic compiler generator system. The system takes as Input a machine description and produces a code generator for the particular

machine. The machine architecture of the target microcomputer is represented using a machine description language based on ISPS with the in ...

¹³ [Lip feature extraction using red exclusion](#)

Trent W. Lewis, David M. W. Powers

December 2000

Selected papers from the Pan-Sydney workshop on Visualisation - Volume 2

Full text available:  pdf(983.98 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Automatic speech recognition (ASR) performs well under restricted conditions, but performance degrades in noisy environments. Audio-Visual Speech Recognition (AVSR) combats this by incorporating a visual signal into the recognition. This paper briefly reviews the contribution of psycholinguistics to this endeavour and the recent advances in machine AVSR. An important first step in AVSR is that of feature extraction from the mouth region. This paper examines several well-known pixel based techniq ...

¹⁴ [Microprocessor architecture: A scalable wide-issue clustered VLIW with a reconfigurable interconnect](#)

Oswaldo Colavin, Davide Rizzo

October 2003

Proceedings of the 2003 international conference on Compilers, architectures and synthesis for embedded systems

Full text available:  pdf(365.28 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Clustered VLIW architectures have been widely adopted in modern embedded multimedia applications for their ability to exploit high degrees of ILP with reasonable trade-off in complexity and silicon costs. Studies have however shown limited performance scaling for wide-issue machines. In this paper we describe the architecture of a clustered VLIW with a runtime reconfigurable inter-cluster bus suitable to address such scalability problem. The architecture is aimed at kernel loops acceleration thr ...

Keywords: IDCT, clustered VLIW, modulo scheduling, reconfigurable co-processor (RCP)

¹⁵ [Jump PDA's, deterministic context-free languages principal AFDLs and polynomial time recognition—\(Extended Abstract\)](#)

Sheila A. Greibach

April 1973

Proceedings of the fifth annual ACM symposium on Theory of computing

Full text available:  pdf(636.59 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Every deterministic context-free language can be accepted by a deterministic finite delay pda with jumps. Increasing the number of types or occurrences of jumps increases the family of languages accepted with finite delay. Hence the family of deterministic context-free language is a principal AFDL; there is a context-free language L_0 such that every context-free language is an inverse gsm image of L_0 or $L_0 - \{e\}$. A si ...


¹⁶ [Hardware/software co-design of a fuzzy RISC processor](#)

V. Salapura, M. Gschwind

February 1998

Proceedings of the conference on Design, automation and test in Europe

Full text available:

 pdf(103.33 KB)

 [Publisher Site](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper, we show how hardware/software co-evaluation can be applied to instruction set definition. As a case study, we show the definition and evaluation of instruction set extensions for fuzzy processing. These instructions are based on the use of subword parallelism to fully exploit the processor's resources by processing multiple data streams in parallel. The proposed instructions are evaluated in software and hardware to gain a balanced view of the costs and benefits of each instructio ...

Keywords: hardware/software co-evaluation, hardware/software co-design, processor core, MIPS RISC processor, fuzzy processing, fuzzy rule evaluation, application specific instruction set processor (ASIP), subword parallelism, VHDL, logic synthesis, instruction set definition, instruction set architecture, performance evaluation

¹⁷ [A microprocessor survey course for learning advanced computer architecture](#)

Kevin Skadron

February 2002

ACM SIGCSE Bulletin , Proceedings of the 33rd SIGCSE technical symposium on Computer science education, Volume 34 Issue 1

Full text available:  pdf(518.87 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

A course that surveys state-of-the-art microprocessors offers an excellent forum for students to see how computer architecture techniques are employed in practice and for them to gain a detailed knowledge of the state of the art in microprocessor design. The University of Virginia has developed such a course, organized around student presentations and a substantial research project. The course can accommodate a range of students, from advanced undergraduates to senior graduate students. The cour ...

¹⁸ [Dialogue: Optimal utterances in dialogue protocols](#)

Paul E. Dunne, Peter McBurney

July 2003

Proceedings of the second international joint conference on Autonomous agents and multiagent systems

Full text available:  pdf(251.80 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Dialogue protocols have been the subject of considerable attention with respect to their potential applications in multiagent

system environments. Formalisations of such protocols define classes of dialogue *locutions*, concepts of a dialogue *state*, and *rules* under which a dialogue proceeds. One important consideration in implementing a protocol concerns the criteria an agent should apply in choosing which utterance will constitute its next contribution to a discussion in prog ...

Keywords: agent communication languages, argumentation and persuasion, computational complexity, dialogue protocols, locution selection

¹⁹ Analysis of techniques to improve protocol processing latency

David Mosberger, Larry L. Peterson, Patrick G. Bridges, Sean O'Malley

August 1996

ACM SIGCOMM Computer Communication Review , Conference proceedings on Applications, technologies, architectures, and protocols for computer communications, Volume 26 Issue 4

Full text available:  pdf(134.96 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper describes several techniques designed to improve protocol latency, and reports on their effectiveness when measured on a modern RISC machine employing the DEC Alpha processor. We found that the memory system---which has long been known to dominate network throughput---is also a key factor in protocol latency. As a result, improving instruction cache effectiveness can greatly reduce protocol processing overheads. An important metric in this context is the *memory cycles per instructi* ...

²⁰ A general computational treatment of comparatives for natural language question answering

Bruce W. Ballard

June 1988

Proceedings of the 26th conference on Association for Computational Linguistics

Full text available:

 pdf(618.59 KB)  [Publisher Site](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

We discuss the techniques we have developed and implemented for the cross-categorical treatment of comparatives in TELI, a natural language question-answering system that's transportable among both application domains and types of backend retrieval systems. For purposes of illustration, we shall consider the example sentences "List the cars at least 20 inches more than twice as long as the Century is wide" and "Have any US companies made at least 3 more large cars than Buick?" Issues to be consid ...

Results 1 - 20 of 32

Result page: [1](#) [2](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)